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GENERAL CATALOG

OF THE

DENTAL SCHOOL

1914-1915



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Northwestern University

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GENERAL CATALOG OF THE DENTAL SCHOOL 1914-1915



Published by the University July, 1914

Northwestern University

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Dental School Calendar

1914-1915

Sept. 28 Mon. Examinations for advanced standing begin

Oct. 6 Tue. Academic year begins

Oct. 16 Fri. Last day for entrance in course

Nov. 26 Thu. Thanksgiving Day

Dec. 19 Sat. Christmas recess, to January 4, Monday, inclusive

1915

Feb. 1 Mon. Mid-year examinations begin

Feb. 11 Thu. Second semester begins

Feb. 12 Fri. Lincoln's Birthday

Feb. 22 Mon. Washington's Birthday

May 20 Thu. Senior examinations begin

May 27 Thu. Junior and Freshman examinations begin

May 29 Sat. Memorial Day

June 7 Mon. Alumni and Commencement Banquet

June 8 Tue. Home Coming Alumni Clinic

June 9 Wed. FIFTY-SEVENTH ANNUAL COMMENCEMENT

June 10 Thu. Practitioner's Course begins

July 7 Wed. Practitioner's Course ends

The University

N the last day of May, in the year 1850, there met in the City of Chicago, at the office of Grant Goodrich, 109 Lake Street, near Dearborn, nine men, Richard A. Blanchard, Jabez K. Botsford, Andrew J. Brown, Henry W. Clark, John Evans, Grant Goodrich, Zadoc Hall, Richard Haney, and Orrington Lunt, to consider the founding of a university in the vicinity of Chicago. They agreed that "the interests of Christian learning demand the immediate establishment of a University in the North-west," and appointed a committee to petition the General Assembly for a charter. January 28, in the next year, 1851, Governor French signed the Act that incorporated "the Trustees of the Northwestern University." The name of the corporation has since been changed to Northwestern University.

The first Board of Trustees consisted of thirty-six persons, some of whom were representatives of annual conferences of the Methodist Episcopal Church and some residents of Chicago or vicinity. The corporation as at present constituted consists of thirty-six trustees elected by the Board, and two elected by each of three annual conferences of the Methodist Episcopal Church, making a total of

forty-two.

The charter provides that a majority of the Board shall be members of the Methodist Episcopal Church, but that no particular religious faith shall be required of those who become students at the institution.

Amendments have provided that other chartered institutions may become departments of the University; that all property of whatever kind or description belonging to or owned by the said corporation shall be forever free from taxation for any and all purposes; that no spirituous, vinous, or fermented liquors shall be sold under license or otherwise, within four miles of the location of the University.

After considering several locations in the vicinity of Chicago, the Trustees selected for the University a tract of land on the shore of Lake Michigan, twelve miles north of the heart of Chicago. Here in 1855 the first University building was erected, and about this location has grown up the City of Evanston, a beautiful residential city of twenty-five thousand inhabitants. The professional schools of Medicine, Law, Pharmacy, Dentistry, and Commerce are situated in the city of Chicago.

The Dental School

HISTORICAL ACCOUNT

THE DENTAL SCHOOL was founded and is maintained for the purpose of preparing young men and young women in the most thorough manner for the practice of dentistry, and for

the promotion of dental science and dental literature.

The Dental School was organized in 1887 and three years later became a department of the University. In 1896 it absorbed the American College of Dental Surgery and for some years occupied the building on Franklin and Madison Streets, Chicago, formerly occupied by that school. It is now located in Northwestern University Building, at the corner of Lake and Dearborn Streets, Chicago, occupying the upper three floors of the building, over 60,000 square feet.

The clinic room, sufficient in extent to accommodate the great clinic and the offices connected with it, is of the best design of construction, consisting of a single room with arched ceiling. It is on the sixth floor, with free light on two sides and abundant skylight. Adjoining the operative clinic is the prosthetic clinic, and on the same floor is the senior Prosthetic laboratory for crown and bridge work, the laboratory for porcelain and cast metal inlay work, an impression room, and two rooms and waiting room for extracting, and a room devoted to radiographic work. The lecture rooms, three in number, are arranged on the amphitheater plan; each accommodates 225 students. Two are for the ordinary class lecture work, and one for the oral surgery clinic which has a waiting-room for surgical patients. a room for diagnosis and the preparation of patients, and a recovery room with sufficient beds for the temporary care of patients. Other rooms are the anatomical laboratory, which is placed well apart, the first year and the second year prosthetic laboratories, the operative technic laboratory, the first year and the second year chemical laboratories, the laboratory for histology and bacteriology, the photographic laboratory, the museum, the reading room, and library.

Northwestern University Building is in the transportation center of over three millions of people living within a radius of forty miles, a location especially advantageous for obtaining the great number of

clinical patients needed in a dental school.

SITUATION AND SURROUNDINGS

The central location of the school and its convenient access from every point affords many and peculiar advantages to its students. It gives them the widest possible range of choice of residence while attending the school, without inconvenience in coming and going. It also gives the school the widest range of territory from which to draw the extensive clinic so necessary to a great dental school. The patients for this clinic come from all parts of the city of Chicago and its suburbs. The personal influence of the students of the school, each one of whom draws from his own friends and acquaintances, made in and about his place of residence, is an invaluable adjunct to the number who come simply as acquaintances of the school. Patients who come as the friends of students make up the personal clinical practice of the individual student.

In this the out-of-town students seem to be in no respect less favored than the student whose home is in the city. This gaining, and holding, a personal clinical practice under the supervision of the instructors in the clinic rooms has come to be one of the features of this school that has a telling effect upon the after-practice of its students. By this plan of work the student not only learns the theory of practice and the manipulations of practical operations in dentistry, but he passes at once to the work of real experience in building a practice for himself; in gaining that skill in professional comity and personal manner between himself and his patients, which is as necessary to him in after years, in drawing together and maintaining a practice, as his knowledge of dental diseases and his skill in their treatment.

For these reasons the residence of students in groups in widely different portions of the city is favored. This also gives the benefits of a more homelike life, while giving in the aggregate a far better conception of life in a great city and decidedly better opportunity to draw upon its advantages, while shunning the disadvantages of large gatherings of students in a single locality.

Chicago is a great city and gives many opportunities to the student who learns to avail himself of them. Lincoln Park on the north offers, besides its beautiful pleasure grounds, some extensive botanical gardens and winter conservatories, where all manner of plants may be enjoyed and studied; a fine zoological collection, where a large variety of animal and bird life may be studied, and the Museum of Natural History, in which there is a very large collection of birds, animals and fossil remains of extinct animal life.

Jackson and Washington Parks on the south, besides their extensive pleasure grounds, also offer splendid botanical gardens and winter conservatories, while the Field Columbian Museum offers a rare collection of Natural History specimens especially suited for the study of comparative dental anatomy, of modern and ancient skulls and the condition of the teeth in the various races and types of men in different ages. The admission to this museum is free to students on presentation of their matriculation tickets to this school.

OTHER LIBRARIES

A number of libraries are accessible to students who have taste for study, or for looking up subjects of scientific or literary interest, or in connection with special studies.

The University library collections offer very abundant facilities for students. They are ample in the number of books adapted to the different schools and are so situated as to be easily accessible; generally within the school buildings. They consist of:

The College collection.

The Law collection.

The Medical collection.

The Pharmacy collection.

The Theodore Menges Library of the Dental School, and

The Theological collection.

CHICAGO LIBRARY (462,361 volumes, January, 1912) is on Michigan Avenue and Washington Street, five minutes' walk from the school. It is one of the finest libraries in the country. Students may receive books from this library when vouched for by responsible persons known to the officials. This library has also many branch offices in different parts of the city, from which books may be received on application. These are convenient to many of the boarding places of students.

THE NEWBERRY LIBRARY is very large (285,000 volumes, January, 1912), and, besides general works, has also a large medical and dental library. It is on North Clark Street and Walton Place, and may be reached in a ten minutes' walk. This is a reference library, and books can be used only in its reading rooms.

THE JOHN CRERAR LIBRARY (270,000 volumes, January, 1912) occupies one and one-half floors in the Marshall Field Building, corner Wabash Avenue and Washington Street. It is devoted mainly to the natural, the physical and the social sciences, with their applications. It is a most excellent collection of books. It is a reference library, and its books are used only in its reading rooms.

The Faculty

Abram Winegardner Harris, Sc.D., LL.D.
President

Greene Vardiman Black, M.D., D.D.S., Sc.D., LL.D.

Professor of Special Pathology, Operative Dentistry, Bacteriology, Materia

Medica, and Therapeutics; Dean

Charles Rudolph Edward Koch, D.D.S. Lecturer on Dental Economics; Secretary

Thomas Lewis Gilmer, M.D., Sc.D., D.D.S. Professor of Oral Surgery

Edmund Noyes, D.D.S.
Professor of Dental Jurisprudence and Ethics

James Harrison Prothero, D.D.S.
Professor of Prosthetic Technics, Prosthetic Dentistry, and Metallography

Twing Brooks Wiggin, M.D.
Professor of Physiology; Instructor in Physical Diagnosis

George Amos Dorsey, Ph.D. Professor of Comparative Anatomy

Ira Benson Sellery, D.D.S. Professor of Orthodontia

Harry Mann Gordin, Ph.D. Professor of Chemistry

Arthur Davenport Black, M.A., M.D., D.D.S. Professor of Operative Dentistry; Assistant in Oral Surgery

Eugene Shaw Willard, D.D.S. Professor of Bacteriology; Assistant in Operative Dentistry

Fred William Gethro, D.D.S.

Professor of Dental Anatomy and Operative Technics; Assistant in Operative Dentistry

Harry Isaac Van Tuyl, B.S., M.D., D.D.S. Professor of Anatomy

George Corwin Poundstone, D.D.S. Professor of Materia Medica and Therapeutics

Herbert Anthony Potts, D.D.S., M.D.

Professor of Pathology; Lecturer on Anæthesia; Assistant in Oral Surgery

Clayton Frank Bloomfield Stowell, D.D.S.

Assistant Professor of Comparative Anatomy; Demonstrator in Extracting

Joseph Eisenstaedt, M.D., D.D.S. Acting Professor in Histology

George Buchanan Macfarlane, D.D.S. Clinical Instructor in Operative Dentistry

Percy Benjamin DeWitt Idler, D.D.S. Clinical Instructor in Operative Dentistry

Lucian Willis Strong, D.D.S. Clinical Instructor in Prosthetic Dentistry

Hillis Talley Brown, D.D.S. Senior Instructor in Anatomy

Alvin Thompson, M.D. Instructor in Histology

Harry Bernard Bernhardt, M.D. Assistant in Histology

Merton Meyne Postle, D.D.S. Instructor in Prosthetic Dentistry

Leigh Edward Butler, D.D.S. Instructor in Operative Dentistry

Luther P. Basford, D.D.S. Examiner of Patients

George Herbert Sutphen, Ph.C. Assistant in Chemistry

George Edward Meyer, D.D.S.
Assistant in Oral Surgery

Floyd De Witte Leach, D.D.S. Radiographer and Lecturer in Radiography

Roscoe Leaton Stout, D.D.S.

Instructor in Prosthetic Technics, in Charge of Prosthetic Laboratory

Allison Lee Tull, B.A., D.D.S. Assistant in Materia Medica

Michael Joseph Buckley, D.D.S.
Special Demonstrator in Orthodontia and Operative Dentistry

Carl Martin Holland, D.D.S. Assistant in Operative Dentistry

Earl Todd Young, D.D.S.
Demonstrator in Operative Dentistry

James Leonard Morlan, B.S., D.D.S. Demonstrator in Operative Dentistry Charles West Freeman, D.D.S. Demonstrator in Operative Dentistry

John Gordinier Pelton, D.D.S. Demonstrator in Operative Dentistry

Roy Arthur Dallager, D.D.S. Demonstrator in Operative Dentistry

George J. Krakow, D.D.S. Demonstrator in Operative Dentistry

Raymond Wesley Horlick, D.D.S. Demonstrator in Operative Dentistry

Thomas White, D.D.S. Demonstrator in Operative Dentistry

Ernest Kennedy, D.D.S. Demonstrator in Prosthetic Dentistry

Robert Edwin Blackwell, D.D.S. Demonstrator in Operative Technic

Admission and Instruction

A candidate for admission to the Dental School will be accepted upon presentation of a diploma or equivalent certificate from an accredited high school or kindred educational institution, which requires not less than 15 High School units before graduation, or upon passing a satisfactory examination. The diploma must be signed by a superintendent of schools, the principal of a high school, or other responsible school officer. A certificate showing that a candidate has been graduated from an accredited high school, or from a school giving an equivalent course, signed by a city or county superintendent of schools, or by a state superintendent of public instruction, will be accepted as the equivalent of a diploma.

A candidate who does not present such diploma or certificate must take an examination before a state superintendent of public instruction, or his deputy, and bring a report showing that the candidate has a preliminary education equivalent to that to be obtained in an accredited high school where at least 15 High School units are

required before graduation.

This School will receive no student who is not present within ten days after the opening day of the session in each year, or in case of necessary delays, by reason of illness properly certified by the attending physician, within twenty days after the opening day. Undergraduate students are not received for special courses in dentistry.

Students registering agree thereby to accept the discipline im-

posed by the Faculty.

It is desirable that students should register early, since the order of assignment of seats in the lecture halls is based upon the order of registration.

ADMISSION TO ADVANCED STANDING

Students from high schools and colleges, wishing credit for courses parallel to courses required in this School, should bring credentials showing the time spent on these subjects and should present their note books written in these courses.

Students who present certificates from other recognized dental schools covering subjects required in this School, may be credited with such studies if their preliminary education was such as would have admitted them to this School as Freshmen, and if the credentials are satisfactory to the Dean and to the professors in the respective departments; but credits are not accepted unconditionally. The Faculty reserves the right to examine any applicant for advanced standing, if in its judgment that should be desirable. When admitted to the third year the candidate must do one full year's work in this School.

Graduates from recognized schools in medicine are credited with

one year of time.

Examinations for advanced standing and for the removal of conditions in the Dental course will begin on September 28th, 1914—one week before the course begins—and no make-up examinations will be given at a later time.

Course for the Degree of Doctor of Dental Surgery*

The course covers three years. The year begins on the first Tuesday in October and closes on Commencement Day of the University in June. There are thirty-two weeks of actual instruction given, six days in each week.

Students for the regular course are received only during the first ten days of the first semester. Students desiring to pursue special

studies may be received at any time.

For regular students who desire to extend their studies to four or more years, a special arrangement of studies will be provided.

A post graduate, or practitioner's course has been specially arranged which begins the day after Commencement in each year, and continues during four weeks thereafter.

METHODS OF INSTRUCTION

The studies of the course are grouped by departments, the work of each department proceeding from the general and fundamental

subjects to the specialized and advanced.

The work in the departments is planned with reference to that of other departments, and the greatest care is taken that the whole shall be so correlated that the student in taking up a new subject will find himself prepared by work done in other departments.

Schedule of Courses

Students are expected to take the courses in the order enumerated, but some deviation from this rule may be allowed in cases

approved by the Faculty.

Each of the departments is presented under the headings as given in the table below, separately and completely, and in alphabetical order, and courses are described fully in the order of the letters.

FIRST YEAR WORK

Anatomy a, b, c, d, e, f, g, h.

Chemistry a, b, c, d.

Histology a, b, c.

Operative Technics c, d, e, f, g, h.

Dental Anatomy a, b.

Physiology a, b, c, d, e.

Prosthetic Technics a, b, c, d, e.

^{*}It is contemplated to extend the course to four years beginning with 1916-17.

SECOND YEAR WORK

Chemistry e, f, g, h.
Histology d, e, f, g.
Materia Medica and Therapeutics
a, b, c.

Operative Dentistry i, j, k. General Pathology a, b. Physiology f, g. Prosthetic Dentistry f, g, h, i.

THIRD YEAR WORK

Comparative Anatomy, a.
Ethics, Jurisprudence, and Dental
Economics, a, b.
Operative Dentistry, l, m, n, o,
p, q.
Bacteriology, w. x.
Oral Surgery, a, b, c, d, e, f.

Anaesthesia, g, h, i.
Radiography, j.
Orthodontia, a, b, c.
Pathology and Therapeutics, a, b, c, d, e, f, g, h.
Prosthetic Dentistry, j, k, l.

Anatomy

PROFESSOR VAN TUYL, DR. BROWN, AND ASSISTANTS

FIRST YEAR

First Semester

- a. Osteology of the Head and Neck—Twelve weeks, two lectures and quizzes a week. Professor Van Tuyl.
- b. Osteology of the Trunk and Extremities—Twelve weeks, two lectures and quizzes a week. Professor Van Tuyl.
- c. Human Dissections—Class divided into sections, each section two three-hour periods a week. Professor Van Tuyl, Dr. Brown and Assistants.
- d. Recitations on Dissections—Two hours a week. Dr. Brown and Assistants.

FIRST YEAR

Second Semester

- e. Angiology, Myology, Neurology—Twelve weeks, one lecture and quiz a week. Professor Van Tuyl.
- f. Visceral Anatomy—Eight weeks, four lectures and quizzes a week. Professor Van Tuyl.
- g. Human Dissections—Class divided into sections, each section two three-hour periods a week. Professor Van Tuyl, Dr. Brown and Assistants.
 - h. Recitations on Dissections-Two hours a week. Dr. Brown.

Chemistry

PROFESSOR GORDIN AND ASSISTANTS

FIRST YEAR

- a. General and Inorganic Chemistry—Lectures and recitations. First semester. Two hours a week. Professor Gordin.
- b. Chemical Laboratory—Illustrative experiments in General and Inorganic Chemistry. First semester. Class divided into sections, each section six hours a week. Professor Gordin and Assistants.
- c. General and Inorganic Chemistry—Lectures and recitations. Second semester. Two hours a week. Professor Gordin.
- d. Laboratory—The metals and their compounds. Qualitative chemical analysis of unknown mixtures, particularly bases and alloys. Second semester. Class divided into sections, each section six hours a week. Professor Gordin and Assistants.

SECOND' YEAR

- e. Organic Chemistry—Lectures and quizzes. One hour a week. Professor Gordin.
- f. Laboratory—Quantitative chemical analysis of dental alloys, etc. Refining of gold, silver and other metals. Laboratory study of cements and other filling materials. Assay of dental alloys for gold, silver, tin, platinum. Practical problems of dental chemistry. First semester. Six hours a week. Professor Gordin and Assistants.
- g. Laboratory—Illustrative experiments in Organic Chemistry. Analysis of saliva. Urine analysis. Second semester. Class divided into sections, each section three hours a week. Professor Gordin and Assistants.

Comparative Dental Anatomy

PROFESSOR DORSEY

THIRD YEAR

a. Evolution—The meaning of similarity of structure; natural selection; changes in organs; correlation of growth between parts; principles of heredity and of fixity of species; tooth forms; definitions and descriptions of the varieties of forms; the typical mammalian dentation; classification of the animal kingdom, with concise descriptions of the typical characteristics of each. First semester. Two lectures a week. Professor Dorsey.

Professional Ethics, Dental Jurisprudence, and Dental Economics

PROFESSOR NOYES AND DR. KOCH

THIRD YEAR

- a. Ethics—Elementary principles of ethics; professional ethics; state laws relating to dentistry; Illinois dental law; dental jurisprudence; general review. First semester. One lecture a week. Professor Edmund Noyes.
- b. Dental Economics—This course embraces practice building, methods of obtaining and retaining patients, business relations between the dentist and his patients, fees, accounts, records of operations, presentation and collection of accounts, methods of economy in the conduct of an office. Second semester. One lecture a week. Dr. Koch.

Histology

PROFESSOR EISENSTAEDT AND ASSISTANTS

FIRST YEAR

- a. Lecture Course—The construction and the use of the microscope. A study of cell structure and functions, of the elementary tissues; histology of the organs; circulatory, lymphatic, alimentary tract, and accessory glands, respiratory system, urinary organs, and skin. One lecture a week. Professor Eisenstaedt.
- b. Laboratory Course—A laboratory study of the subjects of the lecture course. Class divided into sections, each section one three-hour period a week. Professor Eisenstaedt and Assistants.
 - c. Quizzes and Recitations-One hour a week.

SECOND YEAR

- d. The Dental Tissues—Enamel; the peridental membranes; periosteum; bone; mucous membranes and other soft tissues of the mouth. One and two-thirds semesters. One lecture a week. Professor Eisenstaedt.
- e. Embryology—A short course. One lecture a week. One-third of a semester. Professor Eisenstaedt.
- f. Laboratory Course—A laboratory study of the subjects of lecture courses d and e. Class divided into sections, each section one three-hour period a week. Professor Eisenstaedt and Assistants.
 - g. Quizzes and Recitations—One hour a week.

Physiology

PROFESSOR WIGGIN

FIRST YEAR

- a. General Physiology—The structure of the elementary tissue; the chemical composition of the body; the blood; the circulation of the blood. First semester. Two lectures a week. Professor Wiggin.
- b. Quiz Class Work—First semester. Class divided into sections, each section one hour a week.
- c. Respiration—Secretion; food digestion; metabolism; nutrition and diet; animal heat; excretion; muscle; nerve physiology; production of voice. Second semester. Two lectures a week. Professor Wiggin.
- d. Quiz Class Work—Second semester. Class divided into sections, each section one hour a week.
- e. Physical Diagnosis—Class divided into sections, each section one hour a week during four weeks.

SECOND YEAR

- f. The Central Nervous System—Brain; spinal cord; reproductive organs; development. Lectures and recitations. One hour a week. Professor Wiggin.
- g. Quiz Class Work—Class divided into sections, each section one hour a week.

General Pathology

PROFESSOR POTTS

SECOND YEAR

- a. Etiology of Disease—Disorders of nutrition and metabolism; diabetes; fever; general circulatory disturbances; local hyperemia; local anemia; hemorrhage; embolism; infarction; thrombosis; retrogressive processes; atrophy; infiltrations and degenerations; necrosis; inflammation; progressive tissue changes; neoplasms; infections; granulomata; bacteria, and diseases caused by them. Lectures and recitations. One hour a week. Professor Potts.
- b. Quiz Class in Sections—Second semester. Also Laboratory Course—Class divided into sections, each section two hours a week. Professor Potts and Assistant.

Operative Dentistry, Dental Pathology and Bacteriology

PROFESSOR G. V. BLACK, PROFESSOR A. D. BLACK, PROFESSOR WILLARD,
PROFESSOR GETHRO, AND ASSISTANTS

DENTAL ANATOMY

FIRST YEAR

- a. Descriptive Anatomy of the Human Teeth—Nomenclature. First semester. One lecture or recitation a week. Professor Gethro.
- b. Laboratory Course—Studies of the forms of individual teeth; carving the tooth forms in bone or ivory; dissections and studies of the internal parts—pulp chambers and root canals. First semester. Nine hours a week. Professor Gethro and Assistant.

OPERATIVE TECHNICS

FIRST YEAR

- c. Instruments and Instrumentation—A study of instrument forms, instrument construction, and the adaptation of instruments to the excavation of cavities. First third of second semester. One lecture a week. Professor Gethro.
- d. Laboratory Course—First third of second semester. Nine hours a week. Professor Gethro and Assistants.
- e. Cavity Nomenclature—A study of the location of cavities in extracted teeth, of the forms of prepared cavities, of the naming of internal parts of cavities, and of the use of instruments in their preparation. Second third of second semester. One lecture a week. Professor Gethro.
- f. Laboratory Course—Second third of second semester. Nine hours a week. Professor Gethro and Assistants.
- g. Filling Materials and Filling Teeth—Last third of second semester. One lecture a week.
- h. Laboratory Practice--Filling materials and filling prepared cavities; extracted teeth, ivory, or bone. Last third of second semester. Nine hours a week. Professor Gethro and Assistants.

OPERATIVE DENTISTRY

SECOND YEAR

- i. Technical Procedures in Cavity Preparation—Cavity nomenclature; cavity preparation; principles, instruments and appliances, and instrumentation; cavity preparation, by classes of cavities. One lecture and recitation a week throughout the year. Professor Gethro.
- j. Technical Procedures in Filling Teeth—Filling materials; instruments and instrumentation, physics of filling operations, and of finishing fillings. Porcelain inlays; preparation of cavities; formation of matrix; making and inserting inlays; gold inlays. Filling with amalgam, cements, gutta-percha. Exposure and removal of dental pulp. Preparation and filling of root canals. One lecture and recitation a week throughout the year. Professor Gethro.
- k. Operative Clinic—Open to second year students four hours a day during the entire season. Operations amounting to one hundred points required in gold, and one hundred points in amalgam. Professors A. D. Black, Gethro and Assistants.

OPERATIVE DENTISTRY

THIRD YEAR

- 1. Review of Technical Procedures in Filling Teeth—One lecture or recitation a week throughout the year. Professor Willard.
- m. Pathology of Dental Caries—Bacteriology of the human mouth; causative relation of bacteria to dental caries; caries of enamel; caries of dentin; inception and progress of dental caries; conditions of the beginning of dental caries; systemic causes of dental caries; susceptibility and immunity to dental caries; vital phenomena in dental caries; hyperesthesia of dentin; treatment of dental caries; curative effect of fillings; selection of filling materials. First semester. One lecture or recitation a week. Professor A. D. Black.
- n. Management of Patients—Cleanliness; evil habits in chewing food, and their correction. Management of special conditions. Management of cavities by classes; extension for prevention and its limitations; esthetic considerations. Erosions, management of cases of erosion. Atrophy; management of cases of atrophy. First half of second semester. One lecture or recitation a week. Professor A. D. Black.

- o. The Childhood Periods—Management of children; the special pathological conditions of the teeth, their membranes, the gums, etc.; treatment of caries of the deciduous teeth. The shedding of the deciduous teeth; accidents of the shedding process. Growth and absorption of the roots of deciduous teeth. Growth to completion and reduction of the size of the apical foramen of the permanent teeth. Second half of second semester. One lecture or recitation a week. Professor A. D. Black.
- p. Operative Clinics—Open to third year students from 10:30 to 5:30 daily during term time. Operations amounting to two hundred points are required in gold, and two hundred points in amalgam. Professors G. V. Black, A. D. Black, Gethro and Assistants.
- q. Special Fillings—Fillings are made under the instruction and immediate supervision of the special clinical instructors, and later full written descriptions of the conditions indicating the operation, the instrumentation and choice of instruments used, are submitted for grading as to excellence. Dr. Macfarlane and Dr. Idler.

DENTAL PATHOLOGY AND THERAPEUTICS

THIRD YEAR

- r. Review of the Structure and Functions of the Dental Pulp— Hyperemia and inflammation of the pulp; capping exposed pulps; obtunding sensitive dentin. Pulp devitalization; pulp removal; treatment of canals; root filling; suppuration; the healing process; immunity and susceptibility; suppuration of the dental pulp; alveolar abscess; absorption of roots of teeth and of bone; caries of bone; necrosis. A study of germicides and antiseptics with laboratory tests. Bleaching teeth. First semester. One lecture a week. Professor G. V. Black.
- s. Peridental Membranes—Review of histological structures; simple gingivitis; calcic inflammation; phagadenic pericementitis; replantation and transplantation of teeth; functions of the mucous membranes of the mouth; stomatitis; prophylaxis; mouth hygiene. First half of second semester. One lecture a week. Professor G. V. Black.
- t. Preventive Treatment and Oral Prophylaxis—Preventive measures which may be employed by both dentist and patient. Cleanliness and care in relation to the health of the soft tissues. The rela-

tion between operative and prosthetic procedures to the diseases of the soft tissues. Second half second semester. One lecture a week. Professor G. V. Black.

- u. Quizzes, one hour per week throughout the year. Professor Willard.
- v. Clinical Practice—In addition to the above courses, third year students are required to make two hundred points in practical treatments in the Infirmary clinic, and to send in for examination and criticism a complete history of the conditions found and the treatment record of each of ten cases.

Bacteriology

THIRD YEAR

- w. Principles of Bacteriology—The preparation of culture media; management of laboratory cultures; distinguishing varieties of micro-organisms in laboratory cultures; physiology of micro-organisms; poisons produced by micro-organisms; diseases caused by micro-organisms, particularly those of the teeth and mouth; susceptibility and immunity to diseases. One lecture a week. Professor Willard.
- x. Laboratory Work—Preparation of culture media; planting and management of cultures; separation of species in mixed cultures; deriving pure cultures from infected animals; cultures from saliva, from mucous membranes and from carious teeth; staining, mounting, and microscopic studies; diagnosis of unknowns. Class divided into sections, each section three hours a week. Professor Willard.

Oral Surgery

PROFESSOR GILMER, PROFESSOR POTTS, DR. MEYER,
AND ASSISTANTS

THIRD YEAR

a. Surgical Bacteriology—Inflammation; suppuration; wounds; hemorrhage; necrosis; caries of bones; disease of the maxillary sinus, resection of roots; tetanus; ankylosis; arthritis; facial neuralgia; fractures; dislocations; extraction of teeth; malposition of third molars; impacted teeth; replantation, transplantation, and implantation of teeth; cleft palate and harelip; affections of the lips, tongue and mouth; tumors; odontomes; ranula; cysts; aneurisms. One lecture a week. Professor Gilmer.

- b. Recitations and Quizzes—One hour a week. Dr. Meyer.
- **c.** Surgical Clinic—Two hours a week throughout the year. Professor Gilmer, Professor Potts, Dr. Meyer, Assistants and nurses from St. Luke's Hospital.
- d. Special Clinical Instruction—Diagnosis and case histories. One hour a week. Dr. Meyer.
- e. After-Treatment of Surgical Cases—By students, under direction of Professor Gilmer.
- f. Clinic in the Extraction of Teeth, daily—Open to second and third year students. Dr. Stowell.
- g. The Evolution of General Surgical and Local Anaesthesia and Analgesia—State of the patient; nature of operation; choice of anaesthetic; prolonged dental operations; circumstances of administration; inspection and examination of patients; general anaesthetic agents; local and regional anaesthetics, dangers of anaesthesia; ether, chloroform, nitrous oxid; nitrous oxid and oxygen for anaesthesia and analgesia. Second semester. One hour a week. Professor Potts.
- h. Clinical Administration of Anaesthetics—Oral surgery clinic. Two hours a week. Professor Potts.
- i. Clinical Exhibition of Nitrous Oxid Anaesthesia—Daily in extracting clinic. Dr. Stowell.
- j. Radiography—Five lectures and daily clinical instruction. Dr. Leach.

Materia Medica and Therapeutics

PROFESSOR POUNDSTONE AND ASSISTANTS

SECOND YEAR

a. The Sources and Various Forms of Drugs—General and local action of drugs; agencies that modify the action of drugs; the art of prescribing medicines; a critical study of about one hundred drugs, classified according to their therapeutic and toxic action; a special laboratory study of escharotics, germicides, antiseptics, deodorizers. Systematic medication for dental purposes; dental prophylaxis; the use of germicides, antiseptics, escharotics, and astringents in dentistry. First semester. Two lectures a week. Second semester. One lecture a week. Professor Poundstone.

Lectures and Recitations-Professor Poundstone.

- b. Theses—Each student is required to write five theses, of not less than three hundred words each, on subjects assigned.
- c. Clinical Practice—The Infirmary is open to second year students four hours a day for the observation of conditions requiring the use of drugs and for clinical practice in their treatment. Each student is required to make one hundred points in clinical experience. See also Dental Pathology and Therapeutics.
- d. Laboratory Course—Second semester. Class divided into sections, each section two hours a week.

Orthodontia

PROFESSOR SELLERY, DR. BUCKLEY, AND ASSISTANTS

THIRD YEAR

- a. Occlusion and Facial Art—Etiology, classification, diagnosis of malocclusion. The alveolus and alveolar processes, the peridental membranes, and use of models. First semester. One lecture a week. Professor Sellery.
- b. Regulating Appliances, Angle, Guilford, Knapp—Anchorages, jack screws, levers, traction screws, extension arch and combinations, split plates, reciprocal anchorages, retention. Illustrated with models, with movable teeth and enlarged appliances. Stereopticon views, illustrating progressive regulation and final fixation. Second semester. One lecture a week. Professor Sellery.
- c. Clinic or Infirmary Course—Open to students during first and second semesters for practical work in the correction of practical cases. Professor Sellery, Dr. Buckley, and Assistants.

Prosthetic Dentistry

PROFESSOR PROTHERO AND ASSISTANTS

FIRST YEAR

a. Prosthetic Technics—This course covers the fundamental principles of denture construction and crown and bridge work, and accompanies the laboratory course. First semester. One lecture a week. Professor Prothero.

Quiz and Recitation Work-First Semester. One hour a week.

- b. Laboratory Course—Impression taking, model constructing, occluding, waxing, flasking; packing, vulcanizing, and finishing partial and full artificial dentures. First semester. Nine hours a week. Professor Prothero, and Assistants.
- c. Metallography—A descriptive course on the nature and physical properties of metals, especially those used in dentistry, with fundamental principles of their uses; the manipulation of metals, swaging, annealing, solders, and soldering, welding, tempering. Second semester. One lecture a week. Professor Prothero.
- d. Quiz or Recitation—On the work of Courses a, b and c. Second semester. One hour a week.
- e. Laboratory Course—Construction of dies and counter dies; swaging metal bases of German silver; attaching teeth by soldering and by vulcanite; construction of crowns and dummies, all metal, and metal and porcelain; assembling individual crowns and dummies to form bridges; constructing and tempering taps and dies of steel; drawing wire and tubing suitable for the construction of orthodontia appliances. Second semester. Nine hours a week. Professor Prothero, Dr. Stout, and Assistants.

SECOND YEAR

- f. Lecture Course—Review of technic principles outlined in first year; their application to practical operations in the Infirmary. The physical properties of plaster of Paris and other materials employed in prosthesis. Muscles of mastication; force of the bite; movements of the lower jaw; natural arrangement and occlusion of artificial teeth. One lecture a week. Professor Prothero.
 - g. Quiz or Recitation—One hour a week.
- h. Laboratory Course—Construction of full metal and partial metal base dentures, with teeth attached by soldering and by vulcanite; construction and application of clasps to partial dentures; advanced work in crowns and bridges. Nine hours a week. Professor Prothero, Dr. Leach, and Assistants.
- i. Prosthetic Clinic—Each student is required to carry to completion for patients a number of practical cases, representing each of the various classes of prosthesis, amounting to at least one hundred points in crowns and bridges and one hundred points in plate work. Professor Prothero, Dr. Strong, Dr. Postle, and Assistants.

THIRD YEAR

- j. A Critical Review—Summary of recent methods and appliances; application of porcelain in prosthesis; baked porcelain crowns; porcelain bridges, full porcelain dentures; methods of cavity preparation for porcelain inlays; forming, baking, and setting porcelain inlay. Methods of obtaining wax models of cavities, forming investments, and casting, and setting gold inlays. The student is assigned a series of articles for reading, and is required to present a thesis covering the subject named. One lecture a week. Professor Prothero.
- k. Laboratory Course—Cast aluminum base dentures; celluloid dentures; banded Logan crowns; baked porcelain crowns; porcelain bridges; continuous gum dentures. First semester. Six hours a week. Professor Prothero, Dr. Strong, Dr. Postle, and Assistants.
- 1. Prosthetic Clinic—Practical pieces of prosthetic work of all varieties made and fitted for patients in the Infirmary. Studies of the condition of the mucous membranes; the preparation of roots for crowns and the abutments of bridges; making and setting crowns and bridges, and preparation of cavities and setting porcelain or gold inlays. The minimum requirement is two hundred points in crowns and bridges and two hundred points in platework.

Infirmaries

The Operative, Prosthetic, and Orthodontic clinic is open to students' infirmary practice from 10:30 A. M. to 5:30 P. M. each week day during the school year, and from 9 A. M. to 5 P. M. of each week day during the summer vacation. It is at all times abundantly supplied with patients. It is the intention that this infirmary practice shall be as much like an actual dental practice as possible. The develment of the ability to obtain and hold a practice, the observance of professional courtesy toward patients essential to personal success, is regarded equal in importance to the development of manipulative ability.

General Statements

REQUIREMENTS FOR DEGREE

The degree of Doctor of Dental Surgery is conferred upon students recommended therefor by the Faculty of the School. Candidates are recommended who have attended the required courses of

lectures, who have passed satisfactorily all required examinations in the subjects of study, the entire last year having been completed in this School; who have completed the required clinical and laboratory work; who in the judgment of the Faculty are of fit moral character and are 21 years of age; and who have discharged in full all financial obligations to the University.

THE LIBRARY AND READING ROOM

The Menges Library and Reading Room, named in honor of the late Dr. Theodore Menges, occupies, together with the attached Journal Reading Room, three thousand feet of floor space. It is furnished with reading tables and chairs for about one hundred students. The Library contains 3,338 volumes of books on dental and collateral subjects; a fine supply of dictionaries and encyclopedias conveniently placed in the Reading Room for easy consultation; and a nearly complete list of the dental journals that have been published in the English language, with about 17,000 duplicate numbers. The books most used by the students are duplicated, up to six or twelve, and a few to fifteen copies. The books and journals may be used in the Reading Room without restriction, and when the duplication of volumes will allow, they may be drawn out as a circulating library.

THE MUSEUM

The Museum is in the Reading Room and is open to inspection and study. The cases are arranged to show the specimens to the best advantage.

The comparative anatomy specimens are, with the exception of the gorilla and chimpanzee, of which there are full skeletons, heads with the teeth. There is a sufficient number of varieties of each of the several orders to afford specimens of every kind of tooth form and of every variety of placement in mammals, saurians, and snakes, with a large variety of fishes.

The principal specimens of human skulls are, first, an excellent mounting of the separated bones of the adult; second, a fine set of dissections in a series showing the development of the teeth and the roots from the first appearance in the fetus to the full adult development, and illustrating the absorption of the roots of the deciduous teeth, the shedding process, and the replacement by permanent teeth; also the absorption of the alveolar processes after the loss of teeth,

with the changes that occur in the form of the bones of the jaws from childhood to old age. This is an exceptionally complete and valuable set of specimens. There is also a variety of ordinary human skulls.

The Museum contains also a valuable collection of human teeth of abnormal forms; a very full and complete set of specimens illustrating interproximal wear and the flattening of the points of interproximal contact. It is especially rich in casts of cases of supernumerary teeth; some illustrations of the very early forms of artificial teeth, of manufactured porcelain teeth, and of dental instruments, illustrating the development in these lines. This collection has been made in the School largely by students and by alumni, and is being continually increased by donations from those who have met with specimens unusual or rare in practice. Such donations are requested from all practitioners to assist in building up this great museum of abnormal conditions of teeth and of associated parts for the benefit of dental education.

THE UNIVERSITY DORMITORIES

One of the Dormitories in the University Quadrangle in Evanston is reserved for the students of the Dental School. These buildings are situated on the North Campus near the University Gymnasium, and within a five-minute walk to the Elevated trains with direct service to Chicago.

The buildings are architecturally beautiful and are meant to be models in comfort and sanitation. They are fireproof, lighted by electricity, and heated by steam, and amply furnished with shower baths. They will be cared for and provided with all necessary furniture.

The charge for each student for the use of a furnished single room, including care, heat and water, is \$100 a year. The student furnishes his own bedding and towels, but the University takes charge of the laundering of these. In the interest of economy, electric lighting is not included in the general charge, but is apportioned pro rata monthly to the occupants of the building.

Applications for the reservation of rooms should be made to the Secretary of the Dental School and should be accompanied by a deposit of \$10.

Text-Books

Text-books will be on sale in the Theodore Menges Library of the school at publishers' prices. There will be a small profit from the sale of these books, which will be used for the benefit of the library. Students are invited to purchase their books in the school and aid the library. Each student will be required to have the books designated below. The Reference books are in the library and may be used as needed.

FIRST YEAR

Anatomy—Cunningham (new edition). \$6.00 Cloth. \$7.00 Sheep.

Dental Anatomy—Black. \$2.50.

Operative Dentistry—Black. \$10.00.

Prosthetic Dentistry—Prothero. \$7.50.

Physiology—Kirkes. \$3.00. Wiggin. \$2.00.

Gordin's Inorganic Chemistry—\$3.00.

Exercises in Chemistry for Laboratory—McPherson & Henderson. 40 cents.

Histology—Bailey. Ed. 1914. \$3.50.

Medical Dictionary—Stedman. \$4.50. Gould. \$1.00.

SECOND YEAR

Anatomy—(Same as first year.)

Operative Dentistry—Black. (Same as first year.)

Prosthetic Dentistry—Prothero. (Same as first year.)

Physiology—(Same as first year.)

Materia Medica—Prinz. \$3.00.

Pathology—Adami & McCrea. \$5.00.

Chemistry—First Principles in Organic Chemistry—Gordin's. \$2.50.

Comparative Anatomy—Thompson. \$1.50.

Histology—Noyes. Dental Histology and Embryology. \$4.50.

THIRD YEAR

Operative Dentistry—Black. (Same as first and second years.)
Prosthetic Dentistry—Prothero. (Same as first and second years.)
Oral Surgery—Blair's Special Surgery of the Mouth. \$5.00.
Orthodontia—Angle. \$5.00.
Dental Jurisprudence.
Bacteriology—Williams. \$2.00.
Anesthesia—Hewett.
Dental Pathology—Black.

REFERENCE BOOKS

American System of Dentistry.

Manual of Plate Work—Haskell.
Crown and Bridge Work—Evans.
Diseases and Injuries of the Teeth—Smale and Colyer.
Principles of Surgery—Senn.
The American Text-Book of Prosthetic Dentistry—Essig or Turner.
The American Text-Book of Operative Dentistry—Kirk.
Micro-Organisms of the Human Mouth—Miller.
Micro-Organisms—McFarland.
Dental Pathology and Pharmacology—Burchard.
Long's Chemistry.
Gray's Anatomy.
Comparative Dental Anatomy—Tomes, Thompson.
Regional Anatomy of the Head and Neck—Eckley.
Anatomy—Morris, Eckley.
Histology—Piersol, Stohr, Lewis, Sobotta.
Materia Medica—Stevens, Butler.

INSTRUMENTS

The instruments essential to the students in the several departments of the school have been carefully studied and determined. Much care has been taken in the selection of the instrument sets that the variety of forms may be sufficient for the student's needs without being excessive. Close study of this subject and long, careful observation of students and the progress they make in the attainment of manipulative skill show their progress to be closely related to their instrument equipment. Therefore this school must demand that the instrument sets required be obtained by each student as a condition to his continuance in school work.

In operative dentistry it is found that a close adherence to the formula plan, in the study of cutting instruments particularly, is essential in teaching the important subject of cavity preparation, and this will be carried out critically in all the departments of the school. This teaching is begun in the technic classes and the same lines of instruction are followed progressively by teachers and demonstrators in all of the departments to the end of the Senior year, the same instrument sets being used throughout the course of study.

In prosthetic dentistry and in the several laboratories a similar care as to instruments is maintained.

The instruments in the list are required because they are essential to the student's progress, and students must provide them. Students should not bring with them, nor purchase, instruments of other patterns, for they cannot be received as equivalents of the required sets. They are the same as those that have been required in former years. No student is required to make changes in his instrument sets during his three years' course, and these instruments form his instrument equipment for entering practice after graduation.

Instruments and Appliances Required During the Freshman Year

CUTTING INSTRUMENTS.

ORDINAR	IES.
HATCHETS.	HOES.
12-5-6	12-5-6
8-3-6	8-3-6
6-2-6	6-2-6
12-5-12	12-5-12
8-3-12	8-3-12
6-2-12	6-2-12 12-5-23
12-5-23 8-3-23	8-3-23
6-2-23	6-2-23
SPECIAL ENAMEL HA	
tht, 20-9-12	Left, 20-9-12
ht, 15-8-12	Left, 15-8-12
ht, 10-6-12	Left, 10-6-12
SPOON	s.
tht, 20-9-12	Left, 20-9-12
ht, 15-8-12	Left, 15-8-12
tht, 10-6-12	Left, 10-6-12
GINGIVAL MARGIN	N TRIMMERS.
tht, 20-(95)-9-12	Left, 20-(95)-9-12
ht, 20-(80)-9-12	Left, 20-(80)-9-12
ht, 15-(95)-8-12	Left, 15-(95)-8-12
ht, 15-(80)-8-12	Left, 15-(80)-8-12
	STRAIGHT CHISELS.
20-9-6	20
15-8-6 10-6-6	15 10
10-0-0	10

SIDE INSTRUMENTS.

HATO	HETS.	CLEOID.	DISCOID.
5-3-28	3-2-28	20-2-12	20-3-12

AMALGAM PHICGERS

111111111111111111111111111111111111111	GLICO.
30x10-7-12 35-7-12	10x30-7-12 15-7-12
1 Explorer, No. 3.	
1 each, Plugger Points, Un	iversity.
6x12-6-10 Parallelogram. 5-10-3 Round.	
10-10-3 Round.	
20x5-2-18 Foot.	
Automatic Handle, No. 4.	

1	Black's special holding instrument.
	each, Burnishers, Nos. 2, 26, 28.
î	Instrument Roll.
î	Hand Mallet, No. 5.
î	pair Foil Carriers, No. 12.
i	Cement Spatula, No. 24.
	Mining Tables No. 24.
1	Mixing Tablet, No. 2.
1	
1	oz. Absorbent Cotton.
	Arkansas Stone, 2x5x3/8 inches.
1	Bottle of Oil.
1	Root Canal Plugger, No. 35.
1	Root Canal Plugger, No. 36.
1	Root Canal Plugger, No. 35. Root Canal Plugger, No. 36. box narrow Polishing Strips, assorted.
2	Broach Holders, handles of dissimilar
	color.
1	package Barbed Broaches, assorted.
1	box round gutta-percha root canal points
	assorted.
1	Alcohol Lamp with Annealing Tray.
1	sheet Steel for Matrices, gauge 3-1000.
1	sheet Copper for Matrices, gauge 26.
1	Lowell Pin Vise.
1	Boley Millimeter Gauge.
ī	Revolving Head Engine Bit Holder.
1	Pocket Lens, two glasses.
6	Medicine Bottles.
	each, Engine Burs, Nos. 1/2, 1, 3, 5, 7
	11, 16.
1	box Piano Wire, length 6 in., gauge 25.
î	Grobet File, half round, 5 in., No. 1.
î	Grobet File, half round, 5 in., No. 3.
•	Grobet The, Hall round, 5 In., 190. 5.

SPECIALS FOR FRESHMEN.

NOT REQUIRED AFTER THE FRESHMAN YEAR.

1 Work Box.
1 Card Board arranged for Tooth Sections.
1 Card Board arranged for Instrumentation.
1 set (6) Ivory Carving Blocks.
12 small Wood Blocks for Mounting.
1 Tooth Brush Handle.
1 Stick Black Sealing Wax.
1 Spool Black Silk.
1 piece Brass Tubing for cleaning files,
3/4x6 inches.
50 pieces Brass Wire, 4½ inches long,
gauge 13.

In Addition to the Instruments and Appliances Used in the Freshman Year, the FOLLOWING ARE REQUIRED IN THE OPERATIVE CLINIC DURING THE JUNIOR AND SENIOR YEARS.

GOLD FILLING INSTRUMENTS.

1 Automatic Mallet. 1 each Plugger Points.
5- 1-23, Round.
5- 2-23, Round. 7½-10- 3, Round. 5- 1- 0, Bayonet. 7½- 3- 0, Bayonet. 10x 5- 3- 3, Parallelogram. 5x10- 3- 3, Parallelogram. 12x 6- 6-10, Parallelogram. 15x 5- 5-12, Foot. 15x 5- 3-18, Foot.

FINISHING INSTRUMENTS.

1 set of 3 Finishing Knives. 1 set of 6 File-cut Finishing Files. 1 Black's Saw Frame. 1 doz. Kaeber's Saws, one edge. 1 doz. Thread Saws.

AMALGAM PLUGGERS.

35x15-7-12 25x7-12

15x25-7-12

SCALERS.

"G. V. Black School Set of Scalers," 12 instruments, as follows:
1 pair of Peridental Explorers, 15-8-6, R. 1 pair of Peridental Explorers, 15-8-6, R. and L.
1 pair of Pull Scalers, 15, F. and B. (forward and backward curved blades).
1 pair of Pull Scalers, 15-8-6, R. and L.
1 pair of Pull Scalers, 15-8-12, R. and L.
1 pair of Push Scalers, 15-8-12, R. and L.
2 Cleoid Scaler, 25.
3 Sickle Scaler, 20.

ENGINE AND INSTRUMENTS.

Sizes of Burs are given in tenths of millimeters. 12 20 Burs, Round Sizes 8 16 1/2 3 5 7 Nos. 1 Dental Engine. Sizes 12 16 20 Burs, Inverted Nos. 331/2 Cone 34 36 38 40 Burs, Fissure, 8 12 16 20 Sizes Nos. 55½ Sizes 20 Nos. 218 56 25 58 62 25 sq. end 60 Burs, Finishing, 40 Bud oval
Drills, bi-beveled Sizes
Nos.
Sizes 218 219 222 Bud 225 8 10 16 100 101 102 104 8 10 Nos. 114 115 Contra-angle hand piece and burs for engine.

1 Porte Polisher, No. 307.

1 box Wood Polishing Points.

2 Mandrels, No. 303.

1 Mandrel, Morgan-Maxfield. 1 box Emery Paper Disks, ½ inch, grits Nos. 00, 1.

1 box each Sand Paper Disks, 1 inch, grits Nos. 00, 1.
1 box each Cuttlefish Paper Disks, 1/2 and

% inch.
Three Cornered Rubber Polishing 1 doz. Tm. Disks.

ACCESSORIES.

 "Northwestern" Instrument Case.
 Mouth Mirror, No. 3.
 Rubber Dam Punch.
 Universal Rubber Dam Clamp Forceps.
 pair Special Third-Molar Rubber Dam Clamps, right and left.
 each Rubber Dam Clamps, Nos. 5, 9, 14, 18. Hatch Cervical Clamp. pair Rubber Dam Clamps for Roots.
spool of Waxed Floss.
Rubber Dam Holder.
Rubber Dam Weights.
Water Syringe, No. 22.
Chip Syringe, with valve in the back end. 1 Cotton Holder. 1 Cotton Holder.
1 package Barbed Root Broaches, assorted.
2 Smooth Broaches.
1 Glass Slab for sterilizing broaches.
1 sheet Base Plate Gutta-Percha.
1 each Explorers, Nos. 3, 13, 14.
3 Perry Separators, A, B and C, or
1 Universal Separator, Perry or Worsley.

MEDICINE LIST.

 Case Medicine Bottles.
 oz. Peroxid of Hydrogen.
 oz. Oil Cassia, 1; Phenol, 2; Oil Wintergreen, 3. oz. Eugenol. oz. Eucalyptol. oz. Phenol, 95 per cent.
oz. Tincture of Iodine.
oz. Glycerine, Iodine and Zinc.
oz. Tinct. Aconite, 1; Iodine, 1; Chloroform form, 1. 1/2 oz. Dialized Iron.
1/2 oz. Tannic Acid.
1/2 oz. Chlora Percha. Small Stick of Silver Nitrate.

SURGICAL CASE (Seniors Only)

1 Leather Pocket Case.
1 Scalpel, 1½-inch blade.
1 Tenaculum. 1 Sharp Steel Probe. 1 Silver Probe.

1 Grooved Director.
1 Exploring Needle.
1 pair Artery Forceps, 4½ inch.
1 pair Surgeon's Scissors, 4½ inch, straight.

PROSTHETIC DENTISTRY.

1 Plaster Bowl, "B."
1 Plaster Spatula, No. 17.
1 each Impression Trays, Uppers Nos. 2, 3, 22.
1 each Impression Trays, Lowers Nos. 3, 15, 25.
1 "Improved Snow" Occluding Frame.
1 Snow's Face Bow.
1 box Pink Wax.
1 Prothero's Wax Spatula.
1 iron Vulcanite Flask, large size.
1 Flask Wrench, No. 10.
1 Vulcanite File, D. E., half round, 8 inches.
1 each Vulcanite Chisels, Nos. 14, 15.
1 each Kingsley's Finishers, Nos. 4, 5, 6.
1 Felt Cone, large blunt.
1 Felt Wheel, No. 2.
1 each Brush Wheels, Nos. 4, 20, 26.
2 Lathe Chucks.
1 Carborundum Wheel, 1½x¼ inch, grit "B."
1 Mechanical Saw Frame.
1 dozen each Mechanical Saws, Nos. 00, 2.
1 pair Porthero's Mechanical Saws, Nos. 104.
1 pair Round-nosed Pliers, 4½ inches, No. 104.
1 pair Flat-nosed Pliers, 4½ inches, No. 104.
1 pair Prothero's Contouring Pliers.
1 Horn Mallet.
1 Plate Punch No. 1.
1 Solder Tweezers, "L."
1 pair Reese's Solder Pliers.
1 Prothero's Plate Burnisher.
1 Compound Blow Pipe.
1 Asbestos Soldering Block, No. 2.
1 Borax Slate.
1 Plate File, Grobert, half round, 5 inches, No. 3.
1 Gas Burner, No. 12, with spider.

18 inches Rubber Tubing, 1/4 inch.
54 inches Rubber Tubing, 5/16 inch.
1 spool Annealed Iron Wire, 36 gauge.
1/2 lb. Special Asbestos.
1 Melotte's Moulding Outfit.
3 lbs. Babbitt Metal.
3 lbs. Counter-Die Metal.
1 set of (2) Casting Rings.
1 can Calcar or Moulding Sand.
5 dwts. Silver Solder.
1 bottle Separating Fluid.
1/2 lb. Modeling Composition.
3 sheets Sandpaper, No. 1.
4 sheets Red Maroon Rubber.
1 bottle Shellac Varnish.
1 oz. Powdered Soapstone.
1 box Crystal Borax.
4 inches Steel Wire, 1/4 inch diameter.
12 inches German Silver Wire, 16 gauge.
1 Wire Soldering Frame, 4x4 inches.
1 pair Plate Nippers, No. 3M.
1 Riveting Hammer "B."
1 piece of German Silver Plate, 22 gauge.
1 piece Aluminum Plate, 18 gauge.
1 pair Improved Ivory Cleavers.
1 pair Improved Ivory Cleavers.
1 pair Crown and Collar Scissors, No. 11.
1 pair Crown and Collar Scissors, No. 11.
1 pair Improved Hawk-bill pliers.

SPECIAL FOR JUNIORS.

1 Martin Screw Plate, holes Nos. 0 to 12, series "B."
1 Draw Plate, special.
½ lb. German Silver Plate, 28 gauge.
12 inches German Silver Wire, 14 gauge.
12 inches German Silver Wire, 16 gauge.
12 inches Stub's Steel Wire, 93-1000.

SPECIAL FOR SENIORS. PORCELAIN INSTRUMENTS.

1 "K" Pliers.
1 "K & D" Pin Vise.
1 pair Ball Pliers.
1 Porcelain Carving Instrument.
2 Camel Hair Brushes.
1 set Thompson's Burnishers, Nos. 1, 2, 5, 8,

In addition to the above list it is recommended strongly that each student obtain the quadrangle instruments, both the direct and the back-action, and the back-action pluggers to be used by mallet pressure. It is also recommended that each student obtain his own furnace for porcelain work and his own device for casting gold inlays, and make use of these while in school.

SUMMER CLINICS

The clinic rooms will be open all the year for the benefit of students who may wish to have greater experience in clinical practice under competent supervision. The number of demonstrators during the summer will be ample for the class that may choose to remain with the school. The clinical material is abundant, and an excellent opportunity is afforded for clinical practice.

The value and adequacy of the clinical instruction and experience in practice to students is inestimable. The extent of it can be best understood by an examination of the subjoined condensed tabular statement, extracted from the Examiner's report for the year ending June 30, 1914:

1913	General	Special	Total
July	493	126	619
August	473	147	620
September	449	93	542
October	629	919	1,548
November	533	785	1,318
December	474	619	1,093
1914			
January	552	695	1,247
February	536	686	1,222
March	575	809	1,384
April	562	840	1,402
May	559	563	1,122
June	583	242	825
Carried forward from last year			2,145
	-		
	6,418	6,524	15,087

The special patients are assigned to such students of their acquaintance as they ask to have take care of their cases, while the general patients are assigned by the Examiner to such students as need the particular experience and practice that their cases involve. Many of these general patients have come to the school for a number of years and continue to come in the same manner as they would go to the office of a dental practitioner. The school has thus acquired a very large clinic, really large enough for the instruction of a fairly large class of students, but the students are encouraged to have their friends ask for their especial services, as a step in the direction of the teaching of practice building.

The operations performed for these 15,087 patients during the year were 85,182 in the Operative, 5,547 in the Prosthetic, 389 in the Oral Surgery and 1,475 in the Orthodontia Department; a total of 94,068 separate operations. Among the operations performed in the Operative Clinic were:

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18,995 fillings of all descriptions.

4,414 root fillings.

1,513 pulps devitalized.

2,117 pulps removed under cocain.

1,300 dead pulps removed.

1,592 other pulp treatments.

175 root canal treatments.

221 alveolar abscess treatments.

3 cases of apical pericementitis treated.

379 cases of pyorrhea treated.

5,417 cases of removal of calcareous deposits.

12,003 cases of extraction.

380 cases of administration of general anesthetics.

1,475 cases of administration of local anesthetics.

57 porcelain inlays.
```

In the Prosthetic Department were made and inserted:

336	gold and porcelain bridges	1,058	teeth
636	shell crowns	636	teeth
	Richmond crowns	124	teeth
12	porcelain crowns	12	teeth
197	banded Logan and cast base Davis crowns	197	teeth
504	plain Logan or Davis crowns	504	teeth
1,544	artificial dentures	6,984	teeth
	Total teeth restored or replaced	0.616	

There were 1,010 plates, crowns and bridges repaired. Of the 1,544 artificial dentures inserted there were:

- 22 gold plates.
- 3 celluloid plates.

991 cast gold inlays.

- 13 aluminum plates.
- 1,499 vulcanite plates.
 - 10 Watts' metal.

Fees and Expenses

The annual fees in force for the year 1912-1913 are as follows:

FIRST YEAR
Registration Fee\$ 10.00
*Tuition 150.00
Anatomy Ticket 10.00
Chemical Laboratory 5.00
Histological Laboratory 5.00
Breakage Fee 1.00
Locker Fee
\$181.50
SECOND YEAR
Registration Fee\$ 10.00
*Tuition 150.00
Chemical Laboratory 5.00
Histological Laboratory 5.00
Breakage Fee 1.00
Locker Fee
\$171.50
THIRD YEAR
Registration Fee\$ 10.00
*Tuition 150.00
Final Examination 15.00
Breakage Fee 1.00
Locker Fee
\$176.50

TIME WHEN PAYMENT OF FEES IS DUE

The registration fee must accompany the application for matriculation.

Tuition and the laboratory and breakage fees are payable at the beginning of the school year. Students must come prepared to pay the required fees upon entrance. They will not be admitted to lectures or laboratories unless fees are paid.

The final examination fee, for Seniors, is payable at the beginning of these examinations, and before the candidates for graduation can be admitted to them.

The Tuition Fee may, at the option of the student, be paid in two or three installments. If paid in two installments, \$78.00 must

^{*}It is contemplated to increase tuition fee beginning with 1915-1916.

be paid on the day of entrance, and \$75.00 not later than February 20. If paid in three installments, \$55.00 must be paid on the day of entrance, \$50.00 on January 20 and \$50.00 on April 20.

STUDENTS' EXTRA FUNDS

Students who bring with them larger amounts of funds than their immediate requirements necessitate may deposit the same in the University business office, in the rotunda on first floor, and draw on this deposit from time to time as needed.

STUDENTS' LOCKERS

Lockers for the keeping of students' instruments, engines and extra garments are furnished at a rental of 50 cents per annum. Each student is required to furnish padlocks of his own for his lockers.

RETURN OF FEES

Tuition fees are not returned to students who are suspended or dismissed or absent for any cause except illness, and then only as a special concession by the Trustees. The registration fee is not returned in any case.

HOW PAYMENTS SHOULD BE MADE

Payments should be made in currency or in Chicago or New York exchange, drawn to the order of the Secretary of Northwestern University Dental School. Personal checks will not be accepted.

ROOMS AND BOARD

Rooms and board may be obtained in neighborhoods convenient to the school at \$5.00 to \$8.00 a week. Rooms without board, furnished or unfurnished, may be had at \$6.00 to \$10.00 a month.

A department of the Y. M. C. A. is maintained in our University Building, which looks especially to the students' interest in this direction.

In case students are compelled to do some outside work to assist them while attending school, this department will also endeavor to secure such employment as the student may be able to do without detriment to his educational work.

Course for Graduates and Practitioners

The course opens on June 10, 1915, and continues four weeks, with six days of teaching each week. It includes two hours of lectures and six hours of practical teaching each day, by members of the regular staff of the School. Especial attention is given to porcelain and gold inlays, crowns, bridge work of all kinds, the treatment of pyorrhæa, and the most recent methods in Operative Dentistry, Oral Surgery, and Orthodontia. The studies for 1915 are:

Operative Dentistry—Professor A.D. Black and Professor Gethro. Histology, as applied to Operative Dentistry—Professor Eisen-

staedt.

Oral Surgery—Professor Gilmer and Assistants. Clinic each

Friday.

Dental Pathology and Therapeutics—Professor G. V. Black and Professor Willard. This subject includes diseases of the soft parts, as of the pulp, abscesses, diseases of the gums, etc., met with in the practice of operative dentistry.

Prosthetic Dentistry—Professor Prothero and Assistants.

Orthodontia—Professor Sellery.

Anesthesia—Professor H. A. Potts.

Extracting Clinic with Anesthesia—Dr. C. F. B. Stowell.

Dental Radiography-Dr. F. D. Leach.

PRACTITIONERS' COURSE FEES

Registration	1	 	\$ 5.00
Tuition for	one subject	 	45.00
	two or three subj		
Tuition for	the entire course.	 	70.00

Graduates of Northwestern University Dental School are allowed a reduction of 20 per cent from practitioner's fees.

POST-GRADUATE COURSE LECTURE SCHEDULE, 1915

HOURS	MON.	TUES.	WED.
8:30-9:30	Gethro	Gilmer	Sellery
9:30—10:30	Prothero	Willard	Prothero
HOURS	THURS.	FRI.	SAT.
8:30-9:30	A. D. Black	Sellery	A. D. Black
9:30—10:30	Willard	Eisenstaedt	Prothero

Oral Surgery Clinic—Dr. Gilmer. Friday, 10:30—12:30.

Extracting Clinic—Dr. Stowell. 1:30 p. m. Monday and Wednesday.

Anesthesia-Dr. Potts. 1:30 p. m. Tuesday and Thursday.

Radiography—Dr. Leach. 11:30 Monday.

The laboratory and clinic will occupy the rest of the time.

Dental School

REGISTER OF STUDENTS, 1913-1914

SENIORS

Alcorn, Clare AlexanderMissouri
Anderson, Ross Utah Anderson, Victor Minnesota Arganbright, Ned A Iowa Armour, Ross Nebraska Auter, Stephen L Illinois
Anderson, Victor Minnesota
Arganbright Ned A Lowa
Armour Ross Nahraska
Autor Stanbon I Illinois
Patrice Community
Babbitt, George MasonIllinois Barkley, Gordon CharlesAustralia
Barkley, Gordon CharlesAustralia
Bechtel, Ray EmeryNorth Dakota Benson, John TheodoreIllinois
Benson, John TheodoreIllinois
Bernhisel, Everett ClarkUtah
Bernhisel, John MiltonUtah
Blackwell, Robert Edwin Illinois
Brandt, Roy Obert
Brooks, Anthony Wayne B.S.
Mississippi
Brooks, Anthony Wayne, B.S.,
Puttern II Contain Product
Buttery, Horace CayleyEngland Bybee, Jefferson JUtah
Bybee, Jefferson J
Chappell, Rollo MannIllinois Chisolm, Patrick DonaldAlabama
Chisolm, Patrick DonaldAlabama
Chrisman, Edward W Illinois Christensen, Thomas Selmer. Illinois
Christensen, Thomas Selmer. Illinois
Clarke, Marcus Alleque
Clarke, Marcus Alleque South America Clopper, Paul WIllinois Cohen, SamWisconsin
Clopper, Paul WIllinois
Cohen Sam Wisconsin
Colletti, Alexander Emanuel.Illinois
Collins John Joseph Illinois
Collins, John JosephIllinois Cools, Ludovic, M.DBelgium
Cools, Ludovic, M.D
Corlew, Jesse JohnIllinois Couch, Mefford JeremiahIllinois
Couch, Menord JeremianIllinois
Cruse, MiltonIllinois Crosthwait, Paul VivianMissouri
Crosthwait, Paul VivianMissouri
Cultra, Vernon EllsworthIllinois
Curry, D. EnglishIndiana
Dallimore, Franklin Clyde Utah
Daugherty, Frank BeemanIllinois Daunhauer, Max PIndiana
Daunhauer, Max PIndiana
Davy, OakleyIllinois
Davy, Carrey
DeRoer Jelke Illinois
DeBoer, JelkeIllinois
DeBoer, JelkeIllinois
DeBoer, JelkeIllinois Dickey, James HarveyIllinois Desring Edward Robert
DeBoer, JelkeIllinois Dickey, James HarveyIllinois Desring Edward Robert
DeBoer, JelkeIllinois Dickey, James HarveyIllinois Desring Edward Robert
DeBoer, Jelke
DeBoer, JelkeIllinois

Evans, Raymond AMissouri
Ewing, Clyde DMichigan
*Feiman, Edward MOhio
Fenton, Harold RayMinnesota
Fillinger, ClintonWisconsin
*Fletcher, Cyrus MehingCanada
Foss, William Fritdjof
North Dakota
Frankel, Joseph Edward Wisconsin
Fraser, Charles LyleMontana
Freeland, Henry LloydCanada
Fritsch, Earl DavidIllinois
Funkhouser, Ira, B.S., Pg.B. Indiana
Gallagher, John Connel. Minnesota
Gange, Laurence Will. South Dakota
Gasslander, Carl August TIllinois
*Gault, John SturdivantIowa
Green, Harris T., JrTexas
Green, Julius CaesarIllinois
Green, Julius Caesar
Grosser, Walter WIllinois
Guggenheim, EmanuelIllinois
Hamilton, Robert JamesMichigan
Hanson, Harris GWisconsin
Harper, William Charles Illinois
Harpham, Ralph BarwickIllinois
TT T T T

Harris, Jasper Earl.....Iowa
Haugen, AndrewIllinois
Helm, MeredithMinnesota
Hemsworth, Amos Clark...Iowa
Hipsh, Henry Davis....Tennessee
Hirn, Frederick Joseph...Michigan
Hollister, Harvey Franklin...Iowa
Holloway, Claude Arlie...Illinois

Dybing, Tenny Norway
Eberle, William Roy Illinois
Ellsworth, Jenkin Wisconsin

Hopper, William Gerald...Colorado Horlick, Raymond Albert...Illinois Horn, William Wallace, M.A.,
Ph.D.Indiana Hurley, Charles M.Indiana Hurt, Arthur Edward....Illinois Ingle, John James.....Tennessee Irons, Charles Glenn.West Virginia *Iwato, K.California

^{*}Matriculated but not in attendance. †Did not complete course.

Jackson, Clarence PefferceIowa	Rennie, Will JohnMinnesota
Jamison, William Flavous Utah	Ridgway, J. EmersonIllinois
James Alfred Cormany	
Jaster, AlfredGermany	Rivard, George AlexanderMaine
Jensen, Harold BOregon	Rorer, Clarence GleasonIllinois
Jirka, Robert HugoIllinois	Rose, Ross ShibleyCanada
Johnston, Henry EIowa	Rosenberg, Samuel Harris, A.B.,
Jordan, Jack VernonArkansas	
Julian, Jack Vernon	
Juel, Martin OliverSouth Dakota	Ross, John SIowa
Jung, Leo HenryIllinois	Russell, Robert MTexas
Kato, ChujiJapan	Satek, EdwardIllinois
Kato, SeijiJapan	Saeger, William, Jr Nebraska
Kennedy, John BentonMontana	Schmidt, Joseph JamesIowa
	Cabairdania d France Ambarra
Kettlewell, NormanMinnesota	Schniedwind, Ernst Ambrose,
King, Benjamin Harrison. Wisconsin	A.BIllinois
Knaak, Albert HugoMinnesota	Schwalen, Edward B Minnesota
Kratky, Alfred HarryIllinois	Serles, Maurice Charles
Kremer, Leo WSouth Dakota	South Dakota
Kroshus, George LevorMinnesota	Sears, Ralph AIowa
Kuehn, Nicholas EIndiana	Slack, Roy BernardIowa
LaGrow, Asa JosephIllinois	*Smestad, AageNorway
Lane, Lulu IIllinois	Smith, Harry AlexanderIllinois
Latham, Haidee WIllinois	Soellner, Oscar ChristianIllinois
	Soucek, EdwardIllinois
Lehmann, Marie LuiseGermany	
Lewis, William JohnIowa	Stanton, Charles JohnIllinois
Lipsky, Julius PhilipIllinois	Steffy, Chester ThomasMontana
Lomholt, EdelDenmark	Stephens, Vernon FTexas
Loomis, Milo BennettIowa	Steward, Lester EarlIowa
McKnight, Alves ElwoodIllinois	Stubbert, Frank Burton Illinois
Martin, James CarlIowa	Sullivan, Edmund FrancisIllinois
Menges, Harry DunbaughIllinois	*Taylor, Herbert WilliamIllinois
Merwin, Benjamin Stephen	Templeton, Leo AllenKansas
	Terry, Charles RoyIllinois
Metcalfe, Earl StanleyIowa	Terry, Graydon MasonTexas
Miller Arms Towns A D Venses	Thomas, Newton George, B.A Iowa
Miller, Anna Laura, A.BKansas	Thometz, John RIllinois
Mitchell, John H Mississippi	Thometz, John R
Mortenson, Conrad ErvinUtah	*Twohey, Frank JMinnesota
Moughalian, Levon Bedros Turkey	Vinje, SveinIllinois
Murray, Martin WilliamIllinois	Weiler, Harvey B Pennsylvania
Nolan, Arthur HaroldIowa	Westling, Olaf KunardMinnesota
	White, ThomasIllinois
Oden, Guy RainTexas	
Olson, Caleb JonathanWisconsin	Williams, Aubrey Thomas. Kentucky
Ordon, Henry JamesRussia	Wills, Lellen AlvaWisconsin
Page, Harold WilliamMinnesota	Wilson, Roy MelvilleIowa
Pankonin, George Franklin	Wodrich, William HenryIowa
Minnesota	Wollin, ErvingIllinois Wonder, Harold DeanColorado
D 11 D D' . T 1'	Wonder Harold Dean Colorado
Parcells, Rue PriestIndiana	Vouna Coorge William Illinois
Park, Laurence WalterWisconsin	Young, George WilliamIllinois
Patrick, Clifford LeoSouth Dakota	Zak, Charles FrankIllinois
Pett, Theodore HallOhio	Ziegler, Lorenz HIowa
Prail, Theodore Walter. Minnesota	Ziemke, Louis AWisconsin
	Zwisler, John AlbertIllinois
*Randall, Earl WIowa	
Rea, Victor BentonMichigan	*Matriculated but not in attendance.
Reeve, William DriverUtah	†Did not complete course.

JUNIORS

JUNI	IOKS
Adams, Ben QuincyArkansas Aker, Henry Theodore.South Dakota Alzeno, Guerney E	Gunnarson, Agnar Theodore.
	Locher, Lawrence Raymond10wa
Griffith, Norman Sylvester	*3.5
Gruener, JosephIllinois	*Matriculated but not in attendance. †Did not complete course.

Long, Grace MarieEngland	Roe, WalterIllinois
*Love, Horace ArthurIowa	Rovelstad, Henry Randolph.Illinois
Lutterman, Eldredge JIowa	Ryan, Francis SylvesterCanada
McCollough, Irvin Randolph Texas	Ryan, W. Spencer, M.DIllinois
McIlrath, Hugh AllanAustralia	Sayre, Loren DanaIowa
Mastrud, Conrad Dalvin	Schmitt, EugeneIllinois
South Dakota	Schoonmaker, William Francis
Matsuda, RiichiJapan	South Dakota
Merrifield, Raymond Hodges.	Schroeder, Henry JohnIllinois
Wisconsin	Schubert, Grover OscarIllinois
Mikolas, Joseph Rupert, Jr. Illinois	Seegmiller, George Andrew
Miller, William HMissouri	Wisconsin
Moore, Arthur RoyIllinois	Shipley, James LoraineIllinois
Morrison, William Reginald.	Sletten, Carl OliverNorth Dakota
	Smith, George DIllinois
Mueller, EmilSouth Dakota	Snyder, Louis FSouth Dakota
Munn, Frederick Stanley Canada	Snyder, Raymond EugeneIllinois
Myhre, Barnerd OWisconsin	*Sommerfield, NateIllinois
Nadherny, Joseph FIllinois	Sprafka, George Adam
Nalencz, Ladislaus J Illinois	North Dakota
Neptune, GregIndiana	Stenderson, Harry Gordon, B.S.
Nesler, William MathiasIowa	Canada
Newell, John CooperNebraska	Stevens, Elliott GriffinIllinois
Newton, Herbert RudolphIllinois	Stromberg, NorvinWisconsin
O'Farrell, James DaughtryTexas	
O'Keefe, CharlesNorth Dakota	Thorelius, Carl Gustave Paul
Oppegard, Henry AMinnesota	Illinois
Osborne, Weeden EIllinois	Trevett, Allison BurdetteIowa
	Tuchocki, Leo VictorIllinois
Page, Robert RayIowa Parlin, AlbertIllinois	Tucker, Garland LeeIndiana
	Underwood, William JWisconsin
Pearlman, Louis HenryIndiana	Van Wye, Gail HowardIndiana
Pederson, Hans Ferdinand	*Vitullo, John MIllinois
Minnesota	Walters, Charles LeeMontana
Penberthy, LaVerne Edward. Illinois	Warner, DaleIndiana
Pennigsdorf, WalterIllinois	Watson, Wilbert SCanada
Perrin, Louis IMichigan	Webb, Marion RayUtah
Perry, Harold Tyner North Dakota	Weickardt, Johannes Wilhelm
†Pinkstaff, Ralph WaldoIllinois	Germany
Placek, BohumilIllinois	*Weringhaus, William Ernest
Price, Joseph EMinnesota	Illinois
Rank, Leo FrancisMinnesota	West, Emory OrvilleIowa
Reid, Howard HillVermont	
Rensvold, Philip Matthew	Westfall, Beverly KemperIllinois
South Dakota	Wickstrom, Walter CIllinois
Retter, Henry Helmuth Her-	Wilson, Erwin HaroldIowa
manWisconsin	Wunderlich, Frederick Ran-
Richards, Forrest Charles	dolphIndiana
South Dakota	Young, Jerry WIllinois
†Richter, Ernest Herman	Zimmer, Earl HenryIllinois
South Dakota	
Risetter, Ernest AdolphWisconsin	*Matriculated but not in attendance.
Roberts, Harold CecilIndiana	†Did not complete course.
atobotto, android occir	,

FRESHMEN

INLOI	INILIA
Adams, Angus SanfordOhio Adsit, Harry BrownMinnesota Alexander, Waldo Emerson, B.A	Davidson, Dezsoefy, C Duffy, John Duhig, John Erickson, Ci Feuerstein, I Fey, Lauren †Fischer, Fe Flavin, Cha Folsom, Dee Frazin, Juli Folsom, Dee Frazin, Juli Fuessle, Alf Fullenwider Frink, Edwa Goodson, Le Goold, Loui Gorny, Stepl Gunter, Alv Gutting, Art Harris, Leor *Hefter, Roo Heller, Leor Henry Lee, Herries, He *Holland, T Huff, Rober Hughes, Ber Iddings, Ma Irwin, Vern Isenson, Er Iwamoto, Jo Jacobs, Hen Johnson, R B.S. Johnson, Ru Jonson, Ru Jonson, Joseplan, Johnson, Ru Jonson, Joseplan, Johnson, Ru Jonson, Joseplan, Johnson, Ru Jonson, Joseplan, Hei
Coon, Corliss DaleIowa	
Crary, Earl Harrison, North Dakota	
*Crawford, ThomasPennsylvania	
†Dalton, Bryan Genton	Karr, Ernes
New Zealand	*3.4-4 *- 1
Danhauer, Stanley AIndiana	*Matriculate †Did not cor

Davidson, Walter JosephIllinois	
Dezsoefy, Charles Ludwig. Germany	
Duffy, John WilliamIowa	
Duhig, John PaulIllinois	
Dvorak, Lewis HIdaho	
Ebersole, Louis HenryIllinois	
Erickson, Carl JohnWisconsin	
Feuerstein, FredIllinois	
Fey, Laurence ChristopherTexas	
†Fischer, FerdinandIllinois	
Flavin, Charles JohnIndiana	
Fodor, Julius SIllinois	
Foley, Harold Edward. South Dakota	
Folsom, Dee Lenzi	
Frazin, JuliusIllinois	
Fuessle, Alfred HermanIndiana	
Fullenwider, Harlan DrueIllinois	
Frink, Edward Charles	
Goodson, LeroyTexas	
Goold, LouisIllinois	
Gorny, Stephen Stanley, Ph.G.	
Illinois	
Grossman. Harry AaronIllinois	

Grossman, Harry Aaron....Illinois
*Gunnarson, Chester Alvin...
Minnesota

Gunter, Alvin Guy......Illinois
Gutting, Arthur F.....Wyoming
Harris, Leon A.....Illinois
*Hefter, Roy......Illinois
Heller, Leopold Arthur....Idaho
Henry Lee, Ph.G....North Dakota
Herries, Henry Arthur...Illinois
*Holland, Theodore Albert.Illinois
Huff, Robert Eugene....Texas
Hughes, Benjamin Wm...Illinois
Iddings, Maurice Homer...Indiana
Irwin, Vern Driscoll...Minnesota
Isenson, ErnestIllinois
Iwamoto, John Harnhisa...Japan
Jacobs, Henry Albert.....Illinois
Johnson, Robert Van Ness,
B.S..........Illinois

B.S.Illinois
Johnson, Rufus George...Wisconsin
Joncas, Joseph Severin Ludger

^{*}Matriculated but not in attendance. †Did not complete course.

Katrano, JohnGreece	Quigley, Howa
Kaufman, MervinIndiana	
Kautman, MervinIndiana	Ransom, Giles
Kean, Albert ConkleMinnesota	*Rasmussen, Ra
Keck, William LIllinois	
Kellogg, John S Illinois Kelner, Sophie Illinois	Ratner, David
Kelner, SophieIllinois	*Reiseman, He
Kessler, Laurence, A.BIllinois	Richardson, Ge
Kimmel Fred Joseph Ph C	
Kimmel, Fred Joseph, Ph.G.	Rosenblum, Ma
	Rosenhouse, A
Kisner, Roy MarkleyIllinois	Ross, Richard
Klein, DanielIllinois	Rowan, Thoma
*Kline, Samuel GIllinois	
Kohen, Michael MitchellIllinois	Saltzman, Har
Kohout, James JosephIllinois	Scandling, Orv
Kral, Milo GeorgeIowa	Schmidt, Abri
Krai, Willo George	
Kraschovectz, JosephRussia	Schroeder, Jose
Krueger, AlonzoIllinois	Schruth, Josep
Krueger, AlonzoIllinois *Krueger, Emil E., Ph.G. Minnesota	
†Lewis, Arthur RIllinois	Schultz, Charle
Lieber, MorrisIllinois	*Schumaker, J
Lovegren, LeRoy EldonIowa	Seaman, Ralph
Luginbuhl, Albert COhio	Sears, Victor I
	Seely, Carl Da
Lunden, Oskar Samuel Illinois	
Lynn, Harold JIllinois	Shapiro, Char
†Lyon, Paul LeRoyIllinois	Shesler, John
Magoon, Lloyd VernorMichigan	Shipley, Evere
Maly, Lewis WalterWyoming	Smith, Adelbe
Marks, Rodney HughIllinois	Smothers, I. A
Mayor William Frenin Ohio	Snowden, Vau
Mayer, William ErwinOhio	
McArthur, Earl DonaldCanada McCarthy, Thomas Joseph, B.A.	Snyder, Roy H
McCarthy, Thomas Joseph, B.A.	Soffel, Arthur
Illinois	Sprague, Harr
McClintock, Wesley HeathIllinois	Stansbury, Ge
McCurdy, Robert Melvin. Minnesota	Steffes, Eugene
McNamara Paul Francis Wisconsin	Ctainer Allen
McNamara, Paul Francis. Wisconsin Merrifield, Frederick William	Steiner, Allen
Vicinities, Piederick William	Sterrett, Karl
Metz, Louis DavidSouth Dakota	Stiles, Austin
Metz, Louis DavidSouth Dakota	Tarbell, Glee.
Meyer, Fred HenryIllinois	Thon, Raymon
Miller, IsadoreIllinois	Trengove, Jess
Moes, Alvin FrancisIowa	Trengove, jess
Moore, Oliver ChesterIllinois	**
Murray William A Illinois	Urbanowicz, I
Murray, William AIllinois *Myre, Herman OMinnesota	
Nathanala Edmin D Wicconsin	Valentine, Fra
Nalborski, Edwin PWisconsin	Vander Wolff,
Newby, Grant WymanWisconsin	*Vincent, Lath
†O'Connell, Martin JamesIllinois	Vanhana Enn
Palmer, Kenneth R Minnesota	Vorhees, Fran
Parker, Harry Wilfred Illinois	Wach, Charle
*Pelletier, Edward DanielCanada	Wallace, Haro
Paterson Clarence Herbert Illinois	
Peterson, Clarence HerbertIllinois Phillips, David WidmannIllinois	*Matriculated
Phillips, David widmannIllinois	
Pollock, William AIllinois	†Did not comp

ard Joseph. Wisconsin Arlington....Idaho andolph NicolayCalifornia JosephIllinois enryIllinois eorge Henry...Illinois auriceIllinois aron J. New York as Francis....Illinois rryIllinois ville Bennett. Michigan in Gustav, Jr.......Wisconsin eph Paul.....Illinois h Charles..Wisconsin es G.Illinois loseph Robert. . Illinois Barnes. South Dakota Hugo.....Illinois avid.....Indiana les Alter.....Illinois T.Indiana ett Bronson.....Iowa ert Nathan..Michigan Alonzo, B.S....Illinois ighnIndiana Herbert......Canada E.....Illinois ry Elmer.....Iowa eorgeIllinois e Q.....Indiana N.......Wisconsin Herin.....Illinois Campbell....MissouriSouth Dakota nd A.....Minnesota se Samuel.....South Dakota Edmund George . · · · · Illinois ink B.....Iowa Josephine Illinois nen Stephen. Minnesota nk Henry.....Illinois s Edward.....Illinois old Harlow..Nebraska

^{*}Matriculated but not in attendance. †Did not complete course.

SPECIAL STUDENTS IN ANATOMY

Mitchell, Robert Andrew...Kansas Neavles, Claud Arthur...Colorado Northrop, Charles Archer.Michigan Passmore, AustinIllinois Primrose, David C....Nebraska Rother, William John...Minnesota Roy, Walter Clarence....Illinois Scofield, Herbert Joseph.Connecticut Sellon, Raymond Newton..Michigan Sharp, Harry Grady.North Carolina Stoddard, Alonzo Edwin..Minnesota Walters, Karl Gress....Ohio Webster, Charles Ernest...Illinois Wertheim, EdgarIllinois Weston, Norman James...Australia Wheelock, Frank Bascom.Wisconsin Wright, Everett Hartrum...Ohio Young, Elmer Frank....Wisconsin Zimmerman, Adelbert J.....Iowa

SPECIAL STUDENTS IN DENTISTRY

PRACTITIONERS' CLASS, 1914

Bostrom, Annie Margareta	Sweden
Dickinson, Henry Hugh, R. D	Idaho
Goldsworthy, Joseph, D.D.S	Wisconsin
Harman, Uriah, D.D.S	Virginia
Huhn, Lloyd Sanford, D.D.S	Illinois
Hynek, Rudolf	Austria

^{*}Matriculated but not in attendance. †Did not complete course.

*Kirshner, Robert, D.D.S	.New York
Lovelace, George Robert, D.D.S	
Murdoch, Herbert Spencer, D.D.S	New Mexico
Oliver, Oren Austin, D.D.S	Virginia
Olson, William Andrew, D.D.S	Montana
Rangeley, Frank Fairfield, D.D.S	Virginia
Sale, Charles Edward, L.D.S	Canada
Tisch, Henry Edmund, D.D.S	Wyoming
Watanabe, Takebumi, D.D.S	Japan
Wittenbrook, Frederick Holmes, D.D.S	Ohio
Young, George Dibrell, D.D.S	Florida

^{*}Not in attendance.

Geographical Distribution of Students

					Post-	
	Seniors	Juniors	Freshmen	Specials	Grad.	Total
Alabama	. т			·		1
Arkansas		1	ī			3
Australia		ī		T		3
Austria					Ţ	1
Belgium						I
California			I			2
Canada	. 4	6	6	3	1	20
China	:			ĭ		1
Colorado				I		3
Connecticut				2		2
Denmark			• •	••		I
England	. I	I				2
Florida					1	I
Georgia			1		I	2
Germany		ĭ	2			5
Greece			1			ĭ
Hawaiian Islands		1				1
Hungary			1			1
Idaho			3		1	4
Illinois	60	- 55	87	7	1	210
Indiana		9	10	2		29
Iowa	. 22	15	12	2		51
Japan	2	2	r		I	6
Kansas	. 2	2		2		6
Kentucky				1		2
Maine	. 1					I
Massachusetts			I			I
Michigan	. 4	3	5	4	• •	16
Minnesota		13	12	2	• •	41
Mississippi	. 2	• •			• •	2
Missouri	. 3	1	1	I	• •	6
Montana	_	1	1	• •	I	7
Nebraska		3	4	3		12
New Mexico			Í		I	2
New York			2	I	I	4

	Seniors	Juniors	Freshmen	Specials	Post-Grad.	Total
New Zealand			1			1
North Carolina				1		1
North Dakota	2	6	7	• •	• •	15
Norway	2	2				4
Ohio		2	6	4	1	15
Oklahoma		I			• •	1
Oregon	. 2				• •	2
Pennsylvania	I	I	1			3
Russia	I					I
South Africa			1			I
South America	I			2		3
South Dakota	6	15	6			27
Sweden		r			1	2
Syria			• •	1		1
Tennessee				1		3
Texas	. 5	4	3	1		13
Turkey	I			• •	• •	I
Utah	8	I	2		• •	11
Vermont		I	• •	••	• •	I
Virginia	. I	2			3	6
Washington		I		• •	• •	1
West Indies		I		• •	• •	1
Wisconsin		18	13	2	1	46
Wyoming	•••		2	<u>··</u>		4
Total The number of women in-	186	172	195	45	17	615
cluded in this table is	5	2	2	r	I	11

Officers for 1914-1915

L. H. Arnold, President, Chicago

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The annual clinics will be held Tuesday, June 8, 1915, at the University Building.

Through the medium of the Journal we have aroused a keener interest among the members of our Association.

All are requested to send in material of interest. The Journal will serve as a medium for the exchange of friendly greetings. A new interest will thus be aroused, and still better work done and more accomplished by our Association in the future.

All members of the Association in good standing will receive the Journal. The payment of their dues, annually, fifty cents, secures the Journal without additional cost.

Any graduate of the Northwestern University Dental School may become a member of the Alumni Association upon payment of the membership fee of one dollar and fifty cents annually.

We ask that the Alumni will support this undertaking even stronger than in the past, and coöperate earnestly with the officers of the Association and the Journal staff in making our official publication a still greater success.

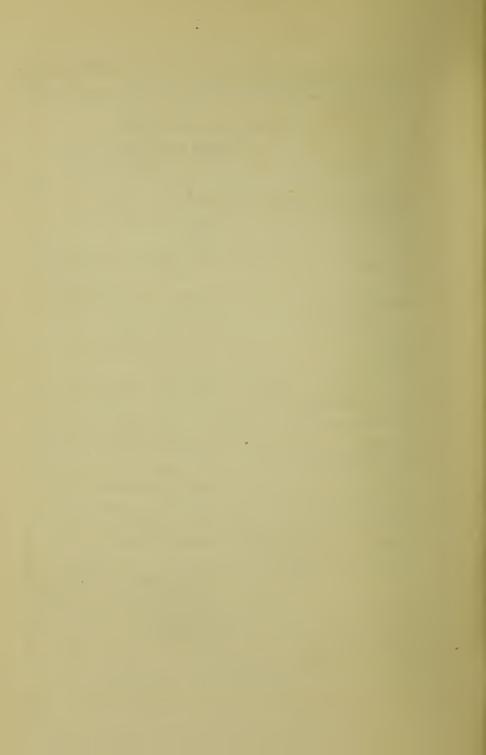
For any information regarding the Association, address the secretary,

Dr. P. B. D. Idler, Secretary-Treasurer, 209 S. State St., Chicago.

For information regarding the *School*, write Dr. C. R. E. Koch, 31 W. Lake St., Chicago.

Index

Page	Page
Admission, requirements for 11	Lockers 35
Advanced Standing 11	Materia Medica21, 22
Anatomy 13	Museum 25
Bacteriology 20	Officers Board of Trustees, University
Calendar 3	Officers for 1914-1915 48
Chemistry 14	Operative Technics ,
Comparative Dental Anatomy 14	·
Degrees12, 24	Operative Dentistry 18
Dental Anatomy	Oral Surgery20, 21
	Orthodontia 22
Dental Economics	Pathology
Dental Jurisprudence 15	Practitioners' Courses 36
Distribution of students44, 45	Professional Ethics
Dormitories 26	Prosthetic Dentistry22, 23, 24
Executive Committee, University. 2	Physiology 16
Faculty	Register of students37 to 44
Fees and expenses34, 35	Requirements for degrees 24
Graduate Courses 36	Rooms and Board 25
Histology15	Schedule of Courses12, 13
History of Dental School 5	Situation 6
Infirmaries 24	Summer Clinics32, 33
Instruments28, 29, 30, 31	Therapeutics19, 21, 22
Libraries, Chicago 7	Text-books 27
Library 25	University 4





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